

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number
WO 2005/013902 A2

- (51) International Patent Classification⁷: **A61K**
- (21) International Application Number:
PCT/US2004/025336
- (22) International Filing Date: 4 August 2004 (04.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/492,367 4 August 2003 (04.08.2003) US
- (71) Applicant (for all designated States except US): **MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH** [US/US]; 200 First Street S.W., Rochester, MN 55905 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **YOUNG, Charles, Y.** [US/US]; 5100 St. Mary Drive N.W., Rochester, MN 55901 (US).
- (74) Agent: **ELLINGER, Mark, S.**; Fish & Richardson P.C., P.A., Suite 3300, 60 South Sixth Street, Minneapolis, MN 55402-1104 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITIONS FOR INHIBITING THE PROLIFERATION OF PROSTATE CANCER CELLS

(57) Abstract: The invention provides for methods of monitoring the proliferation of cultured prostate cancer cells in the presence of celecoxib and/or nimesulide, methods of treating an individual with prostate cancer or at risk of developing prostate cancer, and methods of reducing the risk of recurrence of prostate cancer in an individual who had previously been treated for prostate cancer. Methods of the invention further include treating an individual with benign prostatic hyperplasia (BPH) with celecoxib and/or nimesulide as well as methods of screening for compounds that inhibit the proliferation of prostate cancer cells. The invention provides for compositions and articles of manufacture containing celecoxib and/or nimesulide in particular formulations, and celecoxib and/or nimesulide with a second compound that also exerts an effect on the androgen receptor.

WO 2005/013902 A2